Why Must Some Schizophrenic Patients Be Involuntarily Committed? The Role of Insight

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Twenty-four of 52 (46%) schizophrenic patients hospitalized because of acute psychotic episodes associated with preadmission medication noncompliance required involuntary commitment. Committed patients were rated as significantly more severely ill than voluntary patients and were significantly more likely to be transferred to extended treatment facilities after acute care. However, committed patients were significantly less likely than were voluntarily admitted patients to acknowledge that they were psychiatrically ill and in need of treatment, i.e., to demonstrate insight. Although psychopathology diminished significantly in both committed and voluntary patients over the course of hospitalization, only in voluntary patients did insight increase significantly. Over a 21/2 to 31/2 year follow-up, those patients who had been involuntarily committed at the index hospitalization were significantly more likely to require involuntary radmissions than were the initially voluntary patients. Inability to see the self as ill seems to be a persistent trait in some schizophrenic patients.

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WHY DO SOME INDIVIDUALS with severe psychotic disorders voluntarily seek treatment while others must be involuntarily committed to receive needed care? The answer to this question—so important in designing strategies for delivering treatment to schizophrenic patients—remains obscure. Although several groups of investigators have explored the characteristics of involuntarily committed patients, sometimes in comparison with those who sought care voluntarily,[1] the question of why they require commitment has not been directly addressed.

There are, of course, some intuitions about the basis for severely ill schizophrenic patients' resistance to hospital care. Even in the absence of supportive data, most clinicians would probably point to failures in these patients' recognition of their illnesses and need for care—a defect often referred to as "lack of insight"—as the primary causal factor. Several investigators have examined the attitudes of committed patients shortly after admission and generally found them resistant to the idea that they needed care, but these studies have not examined patients' insight in any systematic way.[2-4] A larger study on the nature of insight among schizophrenic patients offered us the opportunity to do this.[5]

The study examined the relationship between insight and psychopathology in a group of schizophrenic patients who were admitted following an episode of medication noncompliance. These patients were assessed during their hospitalizations using a structured measure of insight, self-ratings of degree of illness, and measures of psychopathology and medication compliance. Information on 46 of

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these patients was available at follow-up 2½ to 3½ years after discharge. The resulting data form the basis for this report.

MATERIALS AND METHODS

Patient Population

Eighty-three patients who met DSM-III criteria for schizophrenia or schizoaffective disorder, and who were judged to be in an acute psychotic episode related to medication noncompliance, were admitted to the Inpatient Schizophrenia Unit of Western Psychiatric Institute and Clinic over the year of intake. Nineteen patients refused to participate in the study, and 12 additional patients whose lengths of inpatient stay were < 14 days were excluded.

Of the remaining 52 patients who comprised our study population, 28 were men and 24 were women. The group ranged in age from 18 to 61 years (mean, 34 ± 12 years), had 6 ± 5 prior hospitalizations, and had their first hospitalization 9 ± 10 years earlier. Twenty-eight patients were admitted on a voluntary basis and 24 were involuntarily committed. Average length of stay was 34 ± 16 days (range, 14 to 85 days).

When the 19 patients who refused participation were compared with the 52 study patients, no significant differences between the two groups were apparent on demographic variables, including legal status.

Assessment Procedures

Measures During Hospitalization

Insight and treatment attitudes questionnaire (ITAQ). This questionnaire (described in detail elsewhere[5]) was administered to each subject by the same examiner at the time of initial consent (mean day, 6 ± 5) and at discharge. Patients' responses to the 11 questions were recorded verbatim. ITAQ responses were scored by consensus as 2=good insight, 1=partial insight, 0=no insight, in weekly meetings involving two psychiatrists and the research associate who administered the questionnaire. Maximum possible total score was 22.

We have shown that ITAQ scores are highly correlated with assessments of insight via an independently obtained, open-ended, audiotaped interview, and that patients with higher ITAQ scores are more cooperative with prescribed medications in the hospital.[5] The ITAQ thus appears to be a valid measure of patients' insight.

Psychopathology ratings. A ward psychiatrist on the inpatient unit completed the Brief Psychiatric Rating Scale (BPRS)[6] and Clinical Global Impressions Global Severity Item (CGI)[7] on the same days the ITAQ was administered.

Medication compliance. Each patient's behavior was rated by one of the Nurse Raters at the time of initial consent and at discharge as: (A) active compliance—patient comes readily for medication at the scheduled times; (B) passive compliance—patient must be sought out for medication, but does not resist when told to take medication; (C) resistance—patient "cheeks" medication but takes medications when they are repeatedly proffered; or (D) overt refusal—medications can only be given against patients' wishes or are not given.

Patients' subjective report. Patients, working closely with one of the Nurse Raters, placed a mark along a 5-in linear analog scale extending from "terrible" to "great," after being instructed to signify thereby how they felt at that time.

Follow-Up Measures

Complaince at 1 month. Follow-up phone calls were made to patients' aftercare clinicians 30 days after discharge to determine whether the patients had attended scheduled aftercare appointments and taken prescribed medications. A categorical global judgment of compliance or noncompliance was then made. Intermittent compliance that substantially interfered with the treatment regimen was rated as noncompliance. Patients referred to extended treatment facilities (n = 11) or readmitted for acute care within 30 days (n = 5) were excluded from this assessment.

Compliance over the course of follow-up. Outpatient charts were reviewed and outpatient clinicians questioned regarding patients' regularity of attendance at scheduled outpatient visits and compliance with prescribed medications. Among patients who were readmitted, the inpatient charts were also reviewed to make a judgment whether patients had been compliant with medications before admission. A categorical global judgment of compliance or noncompliance was then made. Intermittent compliance, as above, was rated as noncompliance.

Readmission. Whether or not patients were readmitted over the entire course of follow-up was recorded. Time at risk for each patient (until lost to follow-up or the end of study) was determined and used to calculate number of hospitalizations per year and percent time in hospital over the course of follow-up. Patients were divided into groups averaging less than one hospitalization per year (76%) or one or more hospitalizations per year (24%), and groups spending 10% or less of the follow-up period in hospital (65%) or more than 10% of the follow-up period in hospital (35%). Total number of readmissions and legal status on each readmission were recorded for each patient.

Statistical Analyses

Voluntary and committed patients were compared on continuous variables via t tests (two-tailed) and on categorical variables using χ^2 tests. Change within groups was examined using paired t tests. A product limit survival analysis was conducted comparing the two groups in terms of percent rehospitalized over time of follow-up.

RESULTS

Measures During Hospitalization

Voluntarily admitted and involuntarily committed patients did not differ significantly in age, sex distribution, number of previous hospitalizations, number of years since first hospitalization, or length of stay during the index hospitalization. The results of analyses of the major assessment instruments are presented in Table 1.

Contrasts between voluntary and committed patients. At both initial and final assessments, committed patients were rated as significantly more severely ill than voluntary patients on CGI Global Severity scores. Although differences in BPRS total scores are in the same direction, these did not achieve statistical significance.

Voluntary patients had higher ITAQ scores than did committed patients at initial assessment, with this difference at the border of statistical significance. At final assessment the voluntary patients clearly demonstrated significantly higher ITAQ scores. The Global Self-Assessments of committed patients were significantly more

Table 1. Differences Between Voluntarily Admitted Versus Committed Patients

	Voluntary	Committed	Probabiity*
CGI global severity			
Initial	4.4 ± 0.8	4.9 ± 0.7	$t = -2.21, P = .032$
Final	3.1 ± 0.8	3.7 ± 0.9	$t = -2.64, P = .011$
Probabiity†	$t = 8.06, P < .001$	$t = 7.25, P < .001$	
BPRS			
Initial	42.0 ± 8.4	43.7 ± 7.8	NS
Final	31.5 ± 9.3	35.2 ± 9.7	NS
Probability†	$t = 6.08, P < .001$	$t = 5.22, P < .001$	
ITAQ			
Initial	9.8 ± 6.0	6.6 ± 5.6	$t = 1.98, P = .053$
Final	13.3 ± 6.3	7.4 ± 5.2	$t = 3.74, P < .001$
Probability†	$t = -4.08, P = .001$	NS	
Self-assessment			
Initial	5.5 ± 2.4	7.6 ± 2.6	$t = -2.37, P = .022$
Final	7.1 ± 2.6	7.6 ± 2.6	NS
Probability†	$t = -2.71, P = .014$	NS	

*Reflects differences between voluntary and committed patients.

†Reflects differences from initial to final assessment points.

positive than those of voluntary patients at initial assessment, but the groups did not differ on this measure at final assessment. The two groups did not differ on medication compliance scores at either initial or final assessment.

Those patients initially committed involuntarily to our short-term unit were significantly more likely (eight of 24) than voluntarily admitted patients (three of 28) to be referred for further inpatient treatment at an extended care facility ($\chi^2 = 3.96$, 1 *df*, $P = .047$).

Within group analyses. Both voluntarily admitted and involuntarily committed patients experienced significant therapeutic benefit from their hospitalizations, as reflected by changes in BPRS total scores and CGI Global Severity scores from initial to final assessment. Among voluntarily admitted patients, ITAQ scores also improved significantly from initial to final assessments as did patients' Global Self-Assessment scores. However, the low ITAQ scores for involuntarily committed patients at initial assessment did not improve significantly by final assessment, and their Global Self-Assessment scores, which were high at initial assessment, did not change by the time of final assessment.

Follow-up Measures

A nonsignificant trend was present for patients who had been voluntarily admitted at index hospitalization to be more compliant with outpatient care at 30 day follow-up ($\chi^2 = 2.22$, 1 *df*, $P = .136$). Legal status at index hospitalization was not significantly related to long-term compliance with aftercare, to whether or not patients were subsequently readmitted over the entire course of follow-up, to number of hospitalizations per year at risk, nor to percent time in hospital over the course of follow-up. The survivorship curves (until first readmission) for voluntary and committed patients are essentially identical.

However, involuntary admission status at the index hospitaliation was associated with future involuntary hospitalization. Of the 16 patients voluntarily admitted at index hospitalization and subsequently readmitted, only three (19%) had any involuntary readmissions. In contrast, of the 12 patients involuntarily committed at index hospitalization and subsequently readmitted, ten (83%) had at least one involuntary readmission ($\chi^2 = 11.50$, 1 *df*, $P = .001$).

DISCUSSION

Our data strongly support the clinical intuition that voluntary and involuntary patients differ in degree of insight into their illness and need for care. Committed patients in our sample displayed significantly lower ITAQ ratings, a validated measure of insight, at the time of admission, relative to voluntary patients. Committed patients require coercive hospitalization because they fail to recognize their need for care.

In addition committed patients' defects in insight appear more intractable. While levels of psychopathology diminished for both groups during hospitalization, only voluntary patients showed an increase in ITAQ ratings over the hospitalization period. This pattern was mirrored in the patient's self-assessment measure, on which involuntary patients rated themselves significantly higher at admission (suggesting a failure of insight, especially given their more severe psychopathology), without change by discharge; voluntary patients, in contrast, noted improvement as hospitalization progressed.

These observations on the relative resistance to improvement of involuntary patients' failures of insight are buttressed by the data from follow-up. Although the overall course of illness did not differ between the two groups, there was a tendency for voluntary patients to be more compliant at 30-day follow-up. More importantly, when hospitalization was required, involuntary patients were significantly more likely to require repeat commitment. Whatever characteristic contributes to an unwillingness to accept voluntary hospitalization, it persists over time. It should be noted, however, that these data do not conflict with earlier studies showing that most of the prior and subsequent hospitalizations of committed patients tend to be voluntary.[2,8] Fifteen of the 28 rehospitalizations among our committed patients were indeed voluntary. But the greater tendency for involuntary commitments is present nonetheless.

Our data are obviously limited by the size of our sample and, in any event, require replication. In addition, our subjects were drawn solely from a group of patients who had been noncompliant with medications prior to admission—a behavior associated with the need for involuntary care. The differences between our two groups might have been greater had this factor been allowed to vary as it ordinarily does in voluntary and committed populations.

Nonetheless, these data in themselves suggest real differences in insight between voluntary and involuntary groups. If confirmed, future efforts should be directed toward further characterization of the differences and attempts to modify the defects found. Such approaches could form the nucleus of a program of psychosocial interventions that might decrease the need for nonconsensual care.

REFERENCES

1. Nicholson RA: Correlates of commitment status in psychiatric patients. Psychol Bull 100:241-250, 1986

2. Kane JM, Quitkin F, Rifkin A, et al: Attitudinal changes of involuntarily committed patients following treatment. Arch Gen Psychiatry 40:374-377, 1983

3. Toews J, el-Guebaly N, Leckie A, et al: Patients' attitudes at the time of their commitment. Can J Psychiatry 29:590-595, 1984

4. Bradford B, McCann S, Merskey H: A survey of patients' attitudes toward their commitment. Psychiatr J Univ Ottawa 11:161-165, 1986

5. McEvoy JP, Apperson LJ, Appelbaum PS, et al: Insight in schizophrrenia: Its relationship to acute psychopathology. J Nerv Ment Dis (in press)

6. Overall JE, Gorham DR: The Brief Psychiatric Rating Scale. Psychol Rep 10:799-812, 1962

7. Guy W: ECDEU Assessment Manual. Washington, DC, Department of Health, Education and Welfare, Publication (ADM) 76-338, 1976

8. Tomelleri CJ, Lakshminarayanan N, Herjanic M: Who are the "committed"? J Nerv Ment Dis 165:288-293, 1977